

**To:** Allgeier, Steve[Allgeier.Steve@epa.gov]  
**From:** Swertfeger, Jeff  
**Sent:** Wed 1/15/2014 8:54:22 PM  
**Subject:** FW: Elk River 4-Methylcyclohexane Methanol Spill Update

See below for a little info from Louisville on jar testing for the stuff. contact Rengao for more info. Are you still interested in this? Should I keep sending this to you?

**From:** Rengao Song [Ex. 6 - Personal Privacy]

**Sent:** Wednesday, January 15, 2014 1:47 PM

**To:** Jerry Schulte; Jim Mehl; Mike Baker; Mike Sherron; Mike Eggert; Robert Francis; Bruce Scott; Julie Roney; Ron Lovan; Mary Carol Wagner; Whitteberry, Bruce; Swertfeger, Jeff; Stuck, Richard; Richard Harrison; Jack Wang; Evansville Water - Tim Hall; Roger Lauder; Jim Sullivan; Max Michael; Kevin Roberts; Rodney Michael; Mt. Vernon Water; Morganfield Water - John Coffman; Sturgis Water; Paducah Water - Mindy Martin; Paducah Water - Glen Anderson; USEC - Paducah; Cairo Water - Rachel Bretz; Cairo Water - Stephen Keith; Cairo Water - Steve Brinkmeyer; binetti, victoria; Bruggers, James; Art Smith; CARROLL, PAT; Paul Tomes; Stuart Bruny; teasterly@idem.in.gov; [Ex. 6 - Personal Privacy] Scott.G.Mandirola@wv.gov

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**Subject:** RE: Elk River 4-Methylcyclohexane Methanol Spill Update

1. SPME-GC-MS detection level ~0.5 ppb. Similar method for MIB analysis.
2. Odor threshold is ~ 3 to 5 ppb. Treatment goal is 3 ppb.
3. PAC works fine, similar to MIB removal. PAC dosages need to be determined by Jar testing.
  - a. The removal percentage is a constant independent of the initial MCHM concentrations. For example, if you have a river MCHM level of 10 ppb and your goal in finished water is 3 ppb: a 70% removal is needed. This 70% is used to determine carbon dosage.
  - b. A common mistake to conduct jar testing is let the carbon mixed/settled too long in the jar. A typical plant should not mix/settle carbon for more than 30 to 45 minutes. PAC adsorption is determined by kinetics.